

WATER MANAGEMENT PLAN TEMPLATE

The following is a guide for development of a Water Management Plan for inclusion in the Agricultural Water Source Development Grant Program Application. The Water Management Plan needs to cover the use of water on the farm operation, including the methods of applying water, the type of conservation measures used to minimize water needed, the amount of water needed, timing and what water sources are currently or planned to be utilized. An example of a water management plan can be found on the web at: <http://www.me.nrcs.usda.gov/technical/IrrigationInfo.html>

WATER MANAGEMENT PLAN COVER SHEET

Include a front page that has all the current contact information for your farm operation.

SUMMARY NARRATIVE

Start your water management plan with a one page summary of your water management plan. Include in the summary a description of how and what you are irrigating, How much water you need now and into the future, what type of sources exist on your land and how you currently use these sources, what type of source you plan to develop, and why you need the new water source.

LAND USE PLAN

In the plan provide a map that shows your property, the location of the well or pond to be developed and directions to the site. A USGS Topographic Map or USDA-Conservation plan map would be ideal. Add the boundaries of the farm unit to be served by the source with the pond/well/impoundment site clearly marked and labeled. Describe any features that pertain to any alternative water sources, including natural ponds, rivers, streams and brooks where water is currently taken from.

WATER BUDGET INFORMATION

We need to know how much water you need, to make sure it meets the size of the water source. Please provide the following water use information. If you do not know how to develop a water budget, or would like assistance with the aid of computer models, please contact the Maine Department of Agriculture Irrigation Program Manager. If you have a water management plan, please note on what page of the plan we can find the information below.

A. Describe current irrigation practices, equipment and timings:

B. Describe proposed irrigation practices, equipment and timings:

C. Description of water delivery system(s) to be used with new source:

D. Conservation methods currently used, or to be used to minimize water use:

IRRIGATION WATER MANAGEMENT PLAN WORKSHEET

Use this worksheet to determine and explain the amount of water you utilize on the farm parcel to be irrigated by the new source. An excel spreadsheet program has been developed and is available from the Maine Department of Agriculture upon request. An online version can be found at :

<http://www.maine.gov/agriculture/mpd/business/irrigation/WaterUseReporting.shtml>

OWNER _____	PLANNER _____
TOWN _____	DATE _____
FARM NAME _____	TOTAL CROP ACRES _____

FIELD NUMBER			
IRRIGATED AREA (Ac.)			
CROP ROTATION			
CROP TO IRRIGATE			
PEAK CONSUMPTIVE USE (In./Day)			
ROOTING DEPTH (In.)			
PREDOMINATE SOIL TYPE			
AVAILABLE WATER CAPACITY (AWC) IN ROOTING DEPTH (In.)			
MAXIMUM APPLICATION RATE (In./Hr.)			
NET WATER APPLIED PER IRRIGATION (In.)			
TYPE OF IRRIGATION SYSTEM			
SYSTEM EFFICIENCY (%)			
GROSS WATER APPLIED PER IRRIGATION (In.)			
GROSS WATER USE PER IRRIGATION (Ac.-Ft.)			
IRRIGATION EVENTS PER SEASON (No.)			
NET IRRIGATION WATER APPLIED PER SEASON (In.)			
GROSS WATER NEEDED PER SEASON FOR IRRIGATION (Ac.-Ft.)			
PLANNED PUMPING RATE (gpm)			
IRRIGATION SCHEDULING METHOD			
POTENTIAL WATER SOURCES			

Note: This worksheet is for planning purposes only. Specific system and component designs will need to meet the requirements of any applicable design criteria, standards and specifications, and manufacturer's recommendations.

WATER SOURCE INFORMATION

The following information is needed to make sure the size of the water source meets the demand for water. Also, we need to know if you have exhausted other, less costly or environmentally sensitive solutions, that the site is suitable for a pond, and that any necessary permits are obtained or in process.

A. If drilling a new well, please provide the following information here:

Diameter of well _____ Estimated /Potential depth of well _____.

Hoped for/Anticipated flow rate of well _____.

B. If building a new pond or expanding an existing pond

1. Size of pond (length \times width \times depth) _____
2. Storage capacity (gallons or acre-feet) _____
3. For dug ponds, soil type to be altered, based on an on-site investigation. _____
4. If applicable, area of wetland to be altered, if any _____ including large excavation, filling or flooding. Note: if wetlands are to be altered, local, state and federal regulatory agencies must be contacted and permits or letters of exemption obtained. See attachment 2.
5. Source of recharge: ___Stream ___Brook ___Groundwater ___Springs___ Surface Runoff
___ Other
6. If recharge is from a stream or brook, detail the amount of water to be withdrawn and when it will be withdrawn

Note: If building an impoundment, include a design by an engineer or other qualified person. If building a pond with embankments above existing grade, you must have a design meeting USDA-NRCS technical standards or equivalent for berm development.

ALTERNATIVE WATER SOURCES WORKSHEET

OWNER _____
TOWN _____
FARM NAME _____

PLANNER _____
DATE _____

SITE NUMBER ALTERNATIVE			
TYPE OF SOURCE			
PUMPING RATE (river or stream, gpm or cfs) (pond or well, gpm)			
POND			
DRAINAGE AREA (Ac.)			
STORAGE CAPACITY (ac-ft)			
AVERAGE DEPTH (ft.)			
POOL AREA (ac.)			
SOURCE OF RECHARGE			
SOIL TYPE			
WETLAND AREA IMPACTED (ac.)			
DISTANCE FROM WELLS OR OTHER WATER BODIES (Ft.) (Well sources only)			

The following narrative describes the potential of each site number alternative and discusses the impacts of using the source for irrigation withdrawals. The narrative also describes that the proposed alternative(s) will best meet the irrigation water requirements while minimizing the impacts on wetland, ponds, streams, and natural resources habitat. If you do not know the size of watershed or wetland area impacted, you can contact the Maine Agricultural Water Management Board. They can put you in contact with the Maine Department of Environmental Protection staff who can do the analysis for you.

List other possible alternative sources and why you did not choose those sources over the proposed source:

Rejected Alternative Source 1:

Reason for Rejection: _____

Rejected Alternative Source 2:

Reason for rejection: _____

Rejected Alternative Source 3:

Reason for rejection _____

Attach additional sheets if needed.

Append any additional information that will support your water management plan, if necessary.